

Illinois and Indiana biologists
understanding of

Trawling on the River

Story and Photos
By Les Frankland

Fisheries biologists working on rivers in Illinois use nets, seines and electroshockers to monitor fish populations. And, in some instances, they trawl.

Trawling has been used for years by biologists and commercial anglers to catch fish and other aquatic life in the oceans and large lakes. Biologists working on large rivers have modified the concept of a small shrimp trawl to create a tool for collecting young-of-the-year and small fish found in main channel areas.

These river trawls have an 8 foot by 1 foot opening called a “mouth” and narrows down to a small tail area called the “cod end.” The mouth is weighed down with a chain called a “tickler chain” which helps keep the trawl on

the bottom where small fish are found. While being towed through the water, the mouth is kept open with boards called “otter boards.” Using this technique, biologists can collect small fish in areas of the river that are difficult to



haul in a broader
the Wabash River.



On the Wabash River, use of modified shrimp trawls by Illinois and Indiana biologists revealed more than 30 species of fish, including a number of unexpected finds.

sample with the usual methods. But because of its bottom-running characteristic, trawling also catches the bottom—a frustrating situation for biologists.

Working with counterparts from the Indiana Department of Natural Resources, Department of Natural Resources fisheries biologists trawled portions of the Wabash River in the summer of 2007.

Located in southeast Illinois, a 200-mile stretch of the river serves as the boundary between Illinois and Indiana.

The 8 foot by 1 foot river trawl “mouth” is kept open by otter boards, shown being pulled from the water.

(Photo by Brant Fisher, Indiana Department of Natural Resources.)



The Wabash begins in Ohio and flows more than 500 miles until its confluence with the Ohio River near Old Shawneetown (Gallatin County). One of the largest free-flowing rivers left east of the Mississippi, the Wabash contains more than 400 miles of unimpeded flow and is home to many unique and sport fish species.

Trawling on the Wabash produced more than 30 species of fish—and many young-of-the-year of species that are seldom seen. Young blue cats and channel cats were collected in large numbers. Unique species, such as blue suckers, shoal chubs and silver chubs, were numerous. Other species picked up in the trawl included mountain mad-toms, channel shiners, river shiners, bullhead minnows, spotted bass, small-mouth bass, dusky darters, slenderhead darters, flathead catfish and sauger. One of the most unusual finds was a pair of adult walleye.

The river darter—absent historically in the lower Wabash—was collected from many locations using the trawl. A large river species, the river darter is most commonly found over sand and gravel in the Mississippi, Kaskaskia and Illinois rivers.

And perhaps one of the most important finds was young-of-the-year shovelnose sturgeon. Good numbers of shovelnose sturgeon occur in the Wabash, most likely because the river has few in-stream modifications.

Biologists from Illinois and Indiana are working to understand the fisheries of the shared 200-mile stretch of the Wabash River.

Biologists use many tools to monitor fish populations. Trawling is one that can be useful in evaluating and maintaining catfish and sturgeon stocks for the Illinois angler, and monitoring populations of unique fish to determine the well-being of the river.



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The trawl sampling technique can provide evidence of successful reproduction, as indicated by this young-of-the-year shovelnose sturgeon.

(Photo by Brant Fisher, Indiana Department of Natural Resources.)

